

53.IT.0009-6.1 Revision: A Effective Date: September 1999

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APPROVAL SIGNATURES		DATE
Louis Blazy (original signature on file)	IV&V Facility Director	9/8/99

REVISION HISTORY			
Rev No.	Description of Change	Author	Effective Date
Initial	Initial Release	Rhonda Fitz IT/300	2/24/99
Rev A	Clarification of NF 1676 form for NASA publication	S.Yassini/IT 232	9/9/99

REFERENCE DOCUMENTS		
Document Number	Document Title	
53.IT.0000	IV&V Facility Quality Manual	
53.IT.0003	Contract Review	
53.IT.0009-6	Management and Performance of	
	Research	
53.IT.0016	Control of Quality Records	
NASA Procedures and Guidelines (NPG)	Guidelines for Documentation, Approval,	
2200.2A	and Dissemination of NASA Scientific and	
	Technical Information	



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1. Purpose

This work instruction provides requirements for the publication and/or the presentation of results of research conducted by or under agreement with the NASA Independent Verification and Validation (IV&V) Facility, the Software Technology Division of Ames Research Center (ARC). This work instruction provides detail for 53.IT.0009-6, Management and Performance of Research, is in accordance with 53.ARC.0000, the IV&V Facility Quality Manual, and is intended to be compliant with NASA Procedures and Guidelines 2200.2A, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information.

2. Scope

The general requirements within this work instruction apply to organizations that perform research in accordance with 53.IT.0009-6, Management and Performance of Research, where the IV&V Facility is responsible for the release of the research results. When the Research Product is a scientific and technical publication, is material for conference or workshop presentation, or is otherwise planned to be discussed in a public (including electronic) forum, these requirements are applicable.

3. Definitions and Acronyms

3.1 Chief Scientist

NASA civil servant with the authority to approve/disapprove any research proposals or activities.

3.2 Conference Presentation

Oral presentation of scientific and technical findings to audiences at society meetings and other professional gatherings.

3.3 Customer

The source of funding or the entity designated in command of a particular research project or activities as defined with a Research Plan.



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3.4 Division Chief

Chief of NASA Ames Research Center Information Sciences and Technology Directorate, Software Technology Division/IV&V Facility.

3.5 NASA Publication

Report published by a NASA center. As part of the NASA STI Report Series, it can be a Technical Publication (TP), Technical Memorandum (TM), Contractor Report (CR), Conference Publication (CP), Special Publication (SP), or Technical Translation (TT).

3.6 NASA Scientific and Technical Information (STI)

Collected set of facts, analyses, and conclusions resulting from scientific, technical, and related engineering research and development efforts, both basic and applied.

3.7 Non-NASA Publication

A technical paper, article, or book reporting on NASA research submitted by a NASA employee, contractor, or grantee for publication through a non-NASA channel (e.g., professional society journals and conference or symposia proceedings).

3.8 Researcher

Person responsible for conducting the research in accordance with a documented Research Plan, reporting status periodically to the Responsible Manager, and documenting and/or presenting research results.

3.9 Research Plan

Documents developed to plan research activities and to describe the scientific and/or technical objectives, the deliverables, and the resources needed. Research Plans include, but are not limited to, research proposals and research-related portions of program/project plans.

3.10 Research Product

Products such as scientific and technical publications, data, research results, and associated system, hardware, and/or software prototypes.



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3.11 Responsible Manager

NASA civil servant having the responsibility to prepare and/or implement Research Plans and activities and the authority to direct specific research activities or processes.

3.12 World Wide Web (WWW)

Electronic information system based on Internet protocols. Placement of NASA STI on the WWW is considered a release to an international audience.

3.13 Acronyms

ARC	Ames Research Center
CP	Conference Publication
CR	Contractor Report
DAA	Document Availability Authorization
FRC	Federal Records Center
IV&V	Independent Verification and Validation
NPG	NASA Procedures and Guidelines
SP	Special Publication
STI	Scientific and Technical Information
TM	Technical Memorandum
TP	Technical Publication
TT	Technical Translation
WWW	World Wide Web

4. Flow Chart

A flow chart is not necessary for this document.

5. Responsibilities

5.1 Dirtecor (or his/her designee) shall:

Review and approve content of all STI authored within the ARC



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Software Technology Division that is planned for dissemination for private and public use,

- Know and follow NPG 2200.2A, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information, and
- Retain the option of delegating these responsibilities.

5.2 Chief Scientist shall:

- Review and approve content of all STI authored within the ARC Software Technology Division Research Branch that is planned for dissemination for private and public use, and
- Be responsible for the retention of all Quality Records regarding the publication and/or presentation of these research results.

5.3 Responsible Manager shall:

- Ensure research is conducted in accordance with 53.IT.0009-6.
- Ensure management and peer reviews are conducted as required by this work instruction, and
- Ensure that all STI resulting from the research task is disseminated in compliance with this procedure.

5.4 Researcher shall:

 Complete Form 1004, ARC Software Technology Division - Review and Authorization Record, and NF 1676, NASA Scientific and Technical Document Availability Authorization (DAA) as is appropriate for research results and publication types.

6. Procedure

6.1 Identify STI for Dissemination

The Researcher, in consultation with the Responsible Manager, identifies the STI to disseminate.

6.2 Select Dissemination Method



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The Researcher or the Responsible Manager shall select the method of dissemination:

- NASA Publication
- Non-NASA Publication
- Conference Presentation
- World Wide Web

6.3 Determine Approvals Required

The Researcher or the Responsible Manager shall determine the necessary management approval(s) as required by Form 1004, ARC Software Technology Division - Review and Authorization Record, and NF 1676, NASA Scientific and Technical Document Availability Authorization (DAA).

6.4 Prepare and Disseminate Materials

Materials shall be prepared and disseminated in accordance with NPG 2200.2A, Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information and the appropriate steps below. The Division Chief's signature on Form 1004, ARC Software Technology Division - Review and Authorization Record is evidence that the final draft conforms to the "Criteria for Publication" stated on the form. Comments to or revision of the Research Product as a result of this final review serve as documentation of nonconformance and shall be maintained with the approved Research Product as objective evidence that the nonconformance has been corrected. Nonconformance reports are not required to be completed or filed for these types of nonconformances.

6.4.1 For a NASA Publication:

- 6.4.1.1 The Researcher writes a draft of the publication. Prior to release, the Researcher shall ensure that Form 1004 and NF1676 are completed in accordance with the instructions on those forms, if applicable, and are distributed for signatures.
- **6.4.1.2** The Researcher prepares the final draft of the publication and shall ensure that all changes required



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by peer and management reviews have been incorporated.

- 6.4.1.3 The Responsible Manager shall ensure that all required signatures have been obtained on NF 1676 and Form 1004, at which time the publication may be released under the conditions of approval.
- 6.4.1.4 The Responsible Manager, upon receipt of the published document, shall distribute copies to the Chief Scientist and to the Customer as appropriate.
- 6.4.1.5 The Chief Scientist is required to maintain the signed Form 1004 and NF 1676 as quality records in accordance with 53.IT.0016, Control of Quality Records.

6.4.2 For a Non-NASA Publication:

- 6.4.2.1 The Researcher writes a draft of the publication. The Researcher shall ensure that Form 1004 is completed in accordance with the instructions on the form. The Researcher shall ensure that the Form 1004 is complete prior to submitting an abstract to a publisher for consideration.
- 6.4.2.2 The Researcher prepares the final draft of the publication and shall ensure that all changes required by peer and management reviews have been incorporated.
- 6.4.2.3 The Responsible Manager shall ensure that all required signatures have been obtained on Form 1004, at which time the publication may be released under the conditions of approval.
- 6.4.2.4 The Responsible Manager, upon receipt of the published document, shall distribute copies to the Chief Scientist and to the Customer as appropriate.
- 6.4.2.5 The Chief Scientist is required to maintain the signed Form 1004 as quality records in accordance with 53.IT.0016, Control of Quality Records.

6.4.3 For a Conference Presentation:



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- 6.4.3.1 The Researcher prepares presentation materials. The Researcher shall ensure that Form 1004 is completed in accordance with the instructions on the forms. The Researcher shall ensure that the Form 1004 is complete prior to submitting an abstract to a conference for consideration.
- **6.4.3.2** If required by the Responsible Manager, the Researcher shall provide a presentation for management review.
- **6.4.3.3** The Researcher or designee makes the presentation at the conference.
- **6.4.3.4** The Researcher shall provide a hardcopy of the presentation materials to management as appropriate.

6.4.4 For the World Wide Web:

- **6.4.4.1** The Researcher shall ensure that Form 1004 is completed in accordance with the instructions on the forms.
- **6.4.4.2** If required by the Responsible Manager, the Researcher shall provide materials for management review and approval.
- 6.4.4.3 The Researcher or the Responsible Manager shall submit materials to the Software Technology Division's WWW authority for required reviews and approvals.
- **6.4.4.4** After obtaining required reviews and approvals, the Researcher or the Responsible Manager submits materials for publication on the WWW.

7. Metrics

The following metrics are to be collected quarterly to support the publication and presentation of research in line with current strategic planning. Each is to be tracked for trend analysis to understand where resources are being applied and with what results. The intent is to improve existing processes and continually revisit research focus strategies:



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- The number of leading research journals that have been strategically identified as representative targets for publication pertaining to each of the IV&V Facility research themes;
- The percentage of the strategically identified leading research journals that currently include a paper(s) written by a researcher(s) of the Software Technology Division, as well as the percentage that rejected submissions;
- The number of papers submitted, accepted, pending, or rejected, categorized as to the professional standing of the accepting publication or conference authority. Also, the papers should be traceable to the theme(s) of research focus.

8. Records

The following Quality Records shall be generated and managed in accordance with 53.IT.0016, Control of Quality Records, when applicable in accordance with this Work Instruction for the Publication and/or Presentation of Research Results, 53.IT.0009-6.1.

Document Name and Identification Number	User Responsible for Record Retention	Retention Requirement	Location
Research Plan	Responsible Manager	Destroy when superseded or one year after project completion	Project File or Electronic File
NASA Scientific and Technical Document Availability Authorization (the signed NF 1676)	Chief Scientist	Permanent	Project File or Electronic File
ARC Software Technology Division - Review and Authorization Record (the signed Form 1004)	Chief Scientist	Permanent	Project File or Electronic File
Quarterly Metrics Report	Chief Scientist	Five years	Project File or Electronic File



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The following forms are required for this document. These forms are part of the records and a copy is essential.

Form Number	Title
NF 1676	NASA Scientific and Technical Document Availability Authorization
Form 1004	ARC Software Technology Division - Review and Authorization Record